

## 1 Vitamin D supplementation versus no supplementation in preterm infants for prevention of vitamin D deficiency

Patient or population: Preterm infants Settings: Newborn intensive care Intervention: Vitamin D supplementation versus no supplementation						
Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Certainty of the evidence (GRADE)	Comments
	Assumed risk No supplementation	Corresponding risk Vitamin D supplementation				
Vitamin D deficiency Follow up: discharge / term corrected age	277 per 1000	80 per 1000 (44 to 147)	RR 0.29 (0.16 to 0.53)	269 (3 studies)	⊕⊕⊕⊖ moderate <sup>1</sup>	RD -0.20, 95% CI -0.29 to -0.11; NNTB 5, 95% CI 3.4 to 9.1  No significant difference found across gestation / birth weight subgroups.
Vitamin D insufficiency or deficiency Follow up: discharge / term corrected age	625 per 1000	331 per 1000 (256 to 425)	RR 0.53 (0.41 to 0.68)	269 (3 studies)	⊕⊕⊖⊖ low <sup>1,2</sup>	RD -0.30, 95% CI -0.41 to -0.19; NNTB 3.3, 95% CI 2.4 to 5.3  No significant difference found across gestation / birth weight subgroups.
Vitamin D excess	See comment	See comment	Not estimable	-	See comment	Not reported

<b>Follow up: discharge / term corrected age</b>						
<b>Radiological evidence of osteopenia of prematurity Follow-up: 4 weeks up to discharge / term corrected age</b>	See comment	See comment	Not estimable	-	See comment	Not reported
<b>Bone mineral content Follow up: discharge / term corrected age</b>	See comment	See comment	Not estimable	-	See comment	Not reported
<b>Secondary hyperparathyroidism Follow up: discharge / term corrected age</b>	See comment	See comment	Not estimable	-	See comment	Not reported
<b>Hypercalcaemia Follow up: discharge / term corrected age</b>	See comment	See comment	Not estimable	-	See comment	Not reported
<p><b>*The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI). CI: Confidence interval; RR: Risk ratio; RD: Risk difference; NNTB: number needed to treat for an additional beneficial outcome</b></p>						
<b>GRADE Working Group grades of evidence</b>						

- 1. High certainty: further research is very unlikely to change our confidence in the estimate of effect.**
- 2. Moderate certainty: further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.**
- 3. Low certainty: further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.**
- 4. Very low certainty: we are very uncertain about the estimate.**

#### Footnotes

<sup>1</sup> Downgraded one level for risk of bias as all trials assessed as high risk of bias.

<sup>2</sup> Downgraded one level for inconsistency as high level of heterogeneity found.